Case 5305AB-14

Preliminary Storm Water Management Report

Project:
Building Addition, Minnesota Masonic Charities
11501 Masonic Home Drive
Bloomington, MN 55437

Prepared for:
Minnesota Masonic Charities
11501 Masonic Home Drive
Bloomington, MN 55437

All plans and supporting Documentation contained in this report have been reviewed and approved by the Registered Engineer listed below and it is hereby certified that the plans comply with the requirements of the ordinance.

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Matthew R. Pavek P.E.

Registration Number: 44263

Date:
4/16/2014

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Preliminary Summary Narrative:

This Storm Water Management Report accompanies the Civil Plans dated 4/16/14 and attached to this report.

Existing Site Conditions:

The existing site is a senior living facility on a 65.7 acre campus. The existing site impervious area is 14.2 acres, and pervious area is 51.5 acres. The site storm water management is currently handled on site by two landlocked basins. The existing soils on site are assumed to be Sandy Loam soils type "A", per NRCS Soil Maps.

Proposed Site:

The proposed building addition project will alter the impervious surface on site as follows:

Existing building to be removed=16,300 SF
Existing walk & drive to be removed=4,840 SF
Existing Total Impervious=21,140 SF

Prop building addition=22,110 SF
Prop walk & drive=2,880 SF
Proposed Total Impervious=24,990 SF

Proposed increased impervious surface = 3850 SF

Drainage patterns will not change.

Time of Concentration is assumed at 15 minutes.

Requirements: Per City of Bloomington

Rate Control:
No net increase in runoff rate

Volume:
No net increase in runoff volume

Water Quality Treatment:
Treatment to NURP standards.

Proposed Storm Water Facilities:

Rate, Volume & Water Quality requirements shall be met by existing land locked basins. Due to the large size of the existing landlocked basins, and the assumed sandy soil types, the increase in impervious area of 3850 SF is negligible and will not result in any storm water runoff from the site.

Therefore rate, volume and quality of runoff leaving the site will not be affected by the proposed building addition.

It should be noted that it is of paramount importance to install and maintain appropriate BMP's for erosion and sediment control as to not adversely affect the function of the existing landlocked infiltration basins. Plans shall reflect the installation of such BMP's for construction.